



U.S. Department of Energy
Energy Efficiency
and Renewable Energy

Bringing you a prosperous future where energy
is clean, abundant, reliable, and affordable

Federal Energy Management Program

USGBC LEED Certified Federal Buildings

Updated October 2004



U.S. Department of Energy
Energy Efficiency and Renewable Energy

National Oceanic & Atmospheric Administration

NATIONAL WEATHER SERVICE CARIBOU, MAINE LEED SILVER CERTIFIED



- 50% of building materials recycled content
- Natural daylighting primary source of daytime lighting
- 75% of total project waste diverted



U.S. Department of Energy
Energy Efficiency and Renewable Energy

National Oceanic & Atmospheric Administration

West Coast/Alaska Tsunami Warning Center Palmer, Alaska LEED Certified

- 30 percent less energy than ASHRAE 90.1 guidelines
- High efficiency HVAC systems
- Over 75% of the waste generated during construction demolition recycled





U.S. Department of Energy
Energy Efficiency and Renewable Energy

Department of Defense – Air Force

PHYSICAL FITNESS CENTER Barksdale AFB, LA LEED BRONZE CERTIFIED



Recycled Rubber Flooring



Reflective Parking Surface



Recycled Plastic Lockers



Low VOC Paints, Adhesives, Sealants



Bachelor Enlisted Quarters Great Lakes Training Center Great Lakes, IL LEED Certified

- Reused site of outdated barracks and recreation facilities
- Exceeds ASHRAE 90.1-1989 prescriptive envelope standards for Chicago area by 24% through use of R-23 wall and R-30 roof insulation and reflective roof
- 31% of materials by cost produced locally, including all concrete





U.S. Department of Energy
Energy Efficiency and Renewable Energy

Department of Defense – Pentagon Renovation Program

Metro Entrance Facility Arlington, VA LEED Certified



- ENERGY STAR® and low-emissivity roofing for 75% of roof area
- Benches constructed from Forest Stewardship Council wood
- Prevented loss of soil during construction



Department of Defense – Pentagon Renovation Program

Athletic Center Arlington, VA LEED Certified

- Green roof provides outdoor garden space, improved insulation, natural water filtration system, and reduced stormwater runoff
- 75% heat recovery from heat exchanger for lap pool and spa
- Bamboo flooring for auditorium stage and waiting area





U.S. Department of Energy
Energy Efficiency and Renewable Energy

Department of Interior – Bureau of Indian Affairs / Army Corps of Engineers

Baca/Dlo'ay azhi Community School Prewitt, NM LEED Certified



- Energy automation systems
- Natural daylighting devices
- Native plants landscape
- Recycled materials



Argonne National Laboratory Warehouse Space Argonne, IL LEED Silver Certified

- Energy-efficient mechanical systems
- Rooftop rain catchment system



- Recycled building materials
- Reduced water requirements by an estimated 40% with native landscaping



ORNL East Campus Modernization Oak Ridge, TN LEED Certified



- Reflective roof
 - Primary-secondary chilled water loops and high-efficiency chillers
 - Building automation, monitoring and controls
-
- Low amount of impervious surfaces and native or adaptive species
 - 90% of furniture installed with low VOC emissions



Bonneville Power Administration, Ampere Annex Vancouver, WA LEED Silver Certified



- Overall 21.85% energy savings compared to ASHRAE 90.1-1999
- Water use reduction of 45% through water-efficient fixtures
- 91% of construction demolition and debris reclaimed and recycled
- 100% of spaces with views to the outdoors



South Rim Maintenance and Warehouse Facility Grand Canyon, AZ LEED Certified

- Recycled materials
- Insulated building envelopes
- Optimal indoor air quality
- Minimized vegetation cleared from the site





U.S. Department of Energy
Energy Efficiency and Renewable Energy

Department of Transportation – Federal Aviation Administration

Seattle Terminal Radar Approach Control Facility Burien, WA LEED Gold Certified



- 33% water use reduction
- 14% energy savings
- 91% construction waste diversion
- 129% weighted average recycled content materials
- 49% locally fabricated manufactured materials
- 60% FSC-certified wood products
- 80% daylit spaces
- 91% exterior view spaces



U.S. Department of Energy
Energy Efficiency and Renewable Energy

Environmental Protection Agency

New England Regional Laboratory Chelmsford, MA LEED Gold Certified



- 100% green power from wind power
- Over 50% of solid waste generated from construction diverted from the landfill and recycled
- Waterless urinals



U.S. Department of Energy
Energy Efficiency and Renewable Energy

Environmental Protection Agency

Kansas EPA Laboratory Kansas City, KS LEED Gold Certified



**72% of construction debris
diverted from landfills**



Clerestory windows



Energy-Efficient small water-cooled chillers



Xeriscaping



Federal Courthouse Building Youngstown, OH LEED Certified



- 600,000 pounds of recycled concrete crushed and reused
- 22% in heating costs and 10% in electricity bills saved
- Reused earth and foundation materials excavated from the original site, saving over \$70,000



Social Security Administration

Child Care Center Woodlawn, MD LEED Certified



- Over 50% of building materials recycled content
- Water efficient landscaping reduced runoff by 50%
- Alternative and public transportation
- 7% increase in boiler efficiency



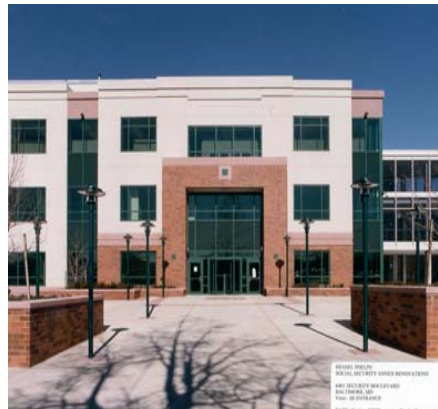
U.S. Department of Energy
Energy Efficiency and Renewable Energy

Social Security Administration

Annex Building Renovation Baltimore, MD LEED Certified



**Total energy savings of
12% below ASHRAE
90.1-1999**



**77% of building's exterior
and 76% of interior
construction materials
reused**



**79% of construction
materials recycled/salvaged**